

**Notice of Allowability**

Application No.

10/707,952

Applicant(s)

LIN, LONG-HUI

Examiner

Art Unit

Andre' C. Stevenson

2812

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

1. ☐ This communication is responsive to \_\_\_\_.
2. ☒ The allowed claim(s) is/are 1-17.
3. ☒ The drawings filed on 28 January 2004 are acceptable.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
a) ☒ All b) ☐ Some\* c) ☐ None of the CERTIFIED copies of the priority documents have been  
1. ☐ received.  
2. ☐ received in Application No. (Series Code / Serial Number). \_\_\_\_.  
3. ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

5. ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

A SHORTENED STATUTORY PERIOD FOR REPLY to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office Action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be available under the provisions of 37 CFR 1.136(a).

6. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
7. ☐ Applicant MUST submit NEW FORMAL DRAWINGS  
(a) ☐ because the originally filed drawings were declared by applicant to be informal.  
(b) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review( PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_.  
(c) ☐ including changes required by the proposed drawing correction filed \_\_\_\_, which has been approved by the examiner.  
(d) ☐ including changes required by the attached Examiner's Amendment / Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

8. ☐ Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any reply to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE / SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

**Attachment(s)**

- |  |   |
|--|---|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                             | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. ____.             |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>2</u> .          | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

## **Detailed Action**

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10707952, filed on January 28, 2004.

The following is an examiner's statement of reasons for allowance: While the prior art teaches the inspection of the contact holes and vias using X-ray analysis, it fails to teach inspecting the sample with a light source to search for the piping defect, wherein the polysilicon layer appears opaque but the dielectric layer appears transparent under the light source.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## ***Allowable Subject Matter***

Claims #1 through 17 are allowed.

### **Claim #1**

- Inspecting the sample with a light source to search for the piping defect, wherein the polysilicon layer appears opaque but the dielectric layer appears transparent under the light source.

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**Claim #9**

- Inspecting the semiconductor wafer under ultraviolet light irradiation and judging the existence of the defect in the dielectric layer according to brightness differences in the image of the semiconductor wafer.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866 – 217 – 9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre C. Stevenson whose telephone number is (571) 272 1683. The examiner can normally be reached on Monday through Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling, can be reached on (571) 272 1683. The fax phone number for the organization where this application or proceeding is assigned is (703) 308 7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 1782. Also, the proceeding number can be used to fax information;

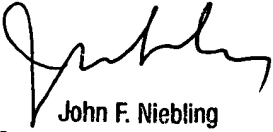
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- **(703) 872-9306**

Andre C. Stevenson

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08/24/04



John F. Niebling  
Supervisory Patent Examiner  
Technology Center 2800